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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,873

04/21/2006

David Bladsjo

JRL-2380-1228

4840

23117

7590

04/01/2009

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EXAMINER

BATISTA, MARCOS

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

04/01/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/576,873

**Applicant(s)**

BLADSJO ET AL.

**Examiner**

MARCOS BATISTA

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-36 and 38-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 30-36, 38-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 01/28/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Action is in response to Applicant's amendment filed on 12/17/2008. Claims 30-76 are still pending in the present application. This Action is made **FINAL**.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 34, 72-76 have been considered but are moot in view of the new ground(s) of rejection.
3. Applicant's arguments filed on 12/17/2008 with regards to claims 30, 40, 44, 50, 51, 56, and 67 have been fully considered but they are not persuasive.

After carefully revising the office action pertinent to the present response and remarks, the following main point(s) have been identified:

The Applicant states that the combination of the polling method of Rinchiuso and Le does not recognize the benefits of using two different polling types (refer to page 16 lines 11-22 of the Applicant's remarks). The Applicant also states that the feature of polling on two separate logical channels is missing from the combination of Rinchiuso and Le.

In response to applicant's argument that there is no suggestion or benefit to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one

of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is clear that Rinchiuso discloses the type of polling which reads on "a complementary second type of polling requiring the user equipment to transmit a data packet to the base station system in response to reception of polling of the second type," as recited in 30 (see par. 0057 lines 8-11- where Rinchiuso discloses "The base station will periodically give the remote unit a chance to transmit data and if the remote unit has no data then the remote unit sends a dummy control block 1204 otherwise the remote unit transmits data blocks 1205"). Le also teaches a type of polling as recited in claim 30, "a first type of polling allowing said user equipment to choose whether or not to transmit a data packet to the base station system in response to reception of polling of the first type," (see par. 0008 lines 8-10 - where Le teaches "The wireless devices, however, are not required to upload data responsive to being polled and in many cases do not"). The combination of the two references read on the two types of polling of the claimed invention.

In regard to the use of logical channels to conduct the polling, Rinchiuso discloses that the use of logical channel for any user desiring to transmit or receive data (see par. 0049 lines 19-21 where – Rinchiuso discloses "More particularly, any user who desires to transmit/receive data will be assigned a logical channel that will utilize the physical data channels").

Therefore, the argued features are written such that they read upon the cited reference(s).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 30-33, 35, 36, 38-71 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Rinchiuso et al. (US 20040196861 A1), hereafter “Rinchiuso,” in view of Le et al. (US 20070097941 A1), hereafter “Le.”

Consider claims 30, 40, 44, 50, 51, 56 and 67, Rinchiuso discloses a method of polling in a packet-based data communications system, said communications system comprising a base station system (100) polling connected user equipment (113) wherein said polling is performed according to: Rinchiuso also teaches a complementary second type of polling requiring the user equipment to transmit a data packet to the base station system in response to reception of polling of the second type (see fig. 12, [0025], [0057] – Corresponding to a second type of polling, the base station 100 requires the remote unit (113) to send a dummy data packet if no data is available to keep the channel up).

Rinchiuso, however, does not particular refer to a first type of polling allowing said user equipment to choose whether or not to transmit a data packet to the base station system in response to reception of polling of the first type.

Le, in analogous art, teaches a type of polling allowing said user equipment to choose whether or not to transmit a data packet to the base station system in response to reception of polling of this type (see pars. 0008 lines 8-10, 0009 lines 1-4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Rinchiuso and have it include a type of polling allowing said user equipment to choose whether or not to transmit a data packet to the base station system in response to reception of polling of this type, as taught by

Le. The motivation would have been in order to better utilize transmission slots available to access points (**see par. 0005**).

Consider claims 31, 41, 46, 55 and 71, Rinchiuso as modified by Le discloses the invention as in claims 30, 40, 44, 51 and 67 above. Rinchiuso also teaches base station system performs polling according to the first type on a first logical channel, and performs polling according to the complementary second type on a second logical channel (see fig. 7, [0049] – The base station assigned logical channels for polling and control purposes LLC).

Consider claims 32, 42, 47, 52 and 68, Rinchiuso as modified by Le discloses the invention as in claims 30, 40, 44, 51 and 67 above. Rinchiuso also teaches the base station system transmits polling information to said user equipment, said information enabling the user equipment to identify the polling type of the received polling (see [0022], [0057] – In [0022], the remote unit is in a suspended state listening to polling request from the base station, but the remote units is taking no action if not data is to be transmitted. In [0056], the remote unit will transmit a dummy block if not data is available on a response to a polling request from the base station. The above mentioned procedures allow the remote unit to distinguish between one type of polling and the other).

Consider claims 33, 43 and 48, Rinchiuso as modified by Le discloses the invention as in claims 32, 42 and 47 above. Rinchiuso also teaches polling information

from the base station system is based on a current radio traffic situation in the communication system (see [0056], [0057] – The base station periodically polls the remote unit to check on transmission status).

Consider claims 35, 49 and 58, Rinchiuso as modified by Le discloses the invention as in claims 30, 44 and 56 above. Rinchiuso also teaches the communications system is selected from at least one of: a General Packet Radio Service (GPRS) communication system, an Enhanced GPRS (EGPRS) communication system, a GPRS Enhanced Data rates for GSM (Global System for Mobile communications) Evolution (EDGE) communications system, a Wideband Code Division Multiple Access (W-CDMA) communications system, a CDMA2000 communications system, a Wireless Local Area Network (W-LAN) communications system (see [0019]).

Consider claims 36, 63 and 65, Rinchiuso as modified by Le discloses the invention as in claims 30, 50 and 56 above. Rinchiuso also teaches wherein said user equipment in response to reception of said polling of the second type transmits a user data packet to the base station system if said user data packet is available for transmission in the user equipment, otherwise the user equipment transmits a dummy data packet (see fig. 11, [0056]). Rinchiuso further teaches wherein said user data packet comprises user payload data and said dummy data packet comprises data enabling the base station system to identify the user equipment (see fig. 11, [0056], [0057] – Whenever a remote unit communicates with a base station in a packet-data system, the data sent from the remote unit contains the id of the remote unit).



Consider claims 38, 60, 62, 64 and 66, Rinchiuso as modified by Le discloses the invention as in claims 30, 40, 44, 50 and 56 above. Le also teaches wherein said user equipment in response to reception of said polling of the first type sends a user data packet to the base station system if said user data packet is available for transmission in the user equipment (see pars. 0008 lines 8-10, 0009 lines 1-4). The motivation would have been in order to better utilize transmission slots available to access points (see par. 0005).

Consider claim 39, Rinchiuso as modified by Le discloses the invention as in claim 30 above. Le also teaches wherein said user equipment in response to reception of said polling of the first type does not send any type of data packet to the base station system if a user data packet is not available for transmission in the user equipment (see pars. 0008 lines 8-10, 0009 lines 1-4). The motivation would have been in order to better utilize transmission slots available to access points (see par. 0005).

Consider claim 45, Rinchiuso as modified by Le discloses the invention as in claim 44 above. Rinchiuso also teaches wherein said base station system comprises third means adapted for analyzing the current radio traffic situation in the communications system and for determining which type of polling to transmit (see fig. 6, [0046] – The base station can use a data limit as a third means for using another polling type).

Consider claims 53 and 69, Rinchiuso as modified by Le discloses the invention as in claims 51 and 67 above. Rinchiuso also teaches wherein said equipment further comprises a buffer unit for storing user data packets awaiting transmission. (see [0022], [0031] – As explained in [0022], the polling illustration is done from the base station to the remote unit, but the same can be performed from the remote unit to the base station in a similar manner. The buffer shown in [0031] would correspond to the remote unit when the remote unit is transmitting the data).

Consider claims 54 and 70, Rinchiuso as modified by Le discloses the invention as in claims 53 and 67 above. Rinchiuso teaches wherein said first circuitry and said second circuitry are adapted to check if there are any user data packets in the buffer in response to polling from the base station system (see [0031], [0056] – The base station will periodically give the remote unit a chance to transmit data. This means that the remote unit will transmit any available data (buffered or current) to the base station on polling request from the base station).

Consider claims 59 and 61, Rinchiuso as modified by Le discloses the invention as in claims 40 and 44 above. Rinchiuso teaches wherein said user equipment in response to reception of said polling of the second type transmits a user data packet to the base station system if said user data packet is available for transmission in the user equipment, otherwise the user equipment transmits a dummy data packet (see fig. 11, [0056]). Le also teaches wherein said user equipment in response to reception of said

polling of type one shall send a user data packet to the base station system if said user data packet is available for transmission in the user equipment (see pars. 0008 lines 8-10, 0009 lines 1-4). The motivation would have been in order to better utilize transmission slots available to access points (see par. 0005).

8. Claims 34, 72-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinchiuso et al. (US 20040196861 A1), hereafter "Rinchiuso," in view of Le et al. (US 20070097941 A1), hereafter "Le," further in view of Tan (US 20040184426 A1), hereafter "Tan."

Consider claim 34, 72-76, Rinchiuso as modified by Le discloses 30, 40, 44, 50, 51, 55 and 67. Rinchiuso as modified by Le, however, does not particular refer to wherein said first polling type comprises polling with an uplink state flag and said second polling type comprises polling with a control block.

Tan, in analogous art, teaches wherein said first polling type comprises polling with an uplink state flag and said second polling type comprises polling with a control block (see par. 0060 lines 6-12 - where Tan teaches a polling scheme using both an uplink state flag and control block of the radio link).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Rinchiuso as modified by Le and have it include wherein said first polling type comprises polling with an uplink state flag and said second polling type comprises polling with a control block, as taught by Tan. The

motivation would have been in order to provide a mechanism to indicate a polling request (see par. 0060 lines 6-12).

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*/Marcos Batista/*  
Examiner

*/Rafael Pérez-Gutiérrez/*  
Supervisory Patent Examiner, Art Unit 2617

03/24/2009